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October 5, 2007Eleanor J. Hark

Eleanor J. Hark

Certificate
OCT 10 2007
of Correction

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

U.S. Patent No. 7,246,736
U.S. Appln. No. 10/720,725Issued: July 24, 2007
Confirmation No. 2760

Applicant: Wang et al.

Title: SUPPLYING SHIELDING GAS

Attention Certificate of Corrections Branch
Commissioner for Patents
PO Box 1450
Arlington VA 22313-1450REQUEST FOR CERTIFICATE OF CORRECTION
UNDER C7 CFR §1.322

Sir:

It is hereby requested that the subject patent be corrected as follows:

Title Page (22) the Filing Date should read Nov. 24, 2003.

Attached are the following papers supporting this request:

1. Copy of the Bibliographic Data Sheet from PAIR bearing the correct filing date.
2. A page dated April 11, 2007, stating the history of the problem and attempts to correct.
3. Copy of Title page of Patent Grant showing correction needed.

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U.S. Patent No. 7,246,736
Page 2

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Please issue the attached Certificate of Correction to correct the above filing
date error in the printed patent.

Respectfully submitted,



JOHN M. CARD (REG.NO 48423)

Attachment PTO/SB/44 (04-05)

OCT 10 2007

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10/720,725

SUPPLYING SHIELDING GAS



Bibliographic Data

Application Number:	10/720,725	Customer Number:	-
Filing or 371 (c) Date:	11-24-2003	Status:	Patented Case
Application Type:	Utility	Status Date:	07-04-2007
Examiner Name:	BEVERIDGE, RACHEL E	Location:	ELECTRONIC
Group Art Unit:	1725	Location Date:	-
Confirmation Number:	2760	Earliest Publication No:	US 2005-0205647 A1
Attorney Docket Number:	GP-302676	Earliest Publication Date:	09-22-2005
Class / Subclass:	228/219	Patent Number:	7,246,736
First Named Inventor:	Pei-Chung Wang, Troy, MI (US)	Issue Date of Patent:	07-24-2007

Title of Invention: SUPPLYING SHIELDING GAS

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- Call the Patent Electronic Business Center at (866) 217-9197 (toll free) or e-mail EBC@uspto.gov for specific questions about Patent Application Information Retrieval (PAIR).
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CC-1 10 2007

U.S. Application 10/720,725

Problem:

1. Postcard, original Filing Receipt, and Notice to File Missing Parts all specify filing date as November 24, 2003.
2. Missing Parts papers (Declaration and Fees) were faxed to PTO on March 18, 2004.
3. Updated Filing Receipt filing date was changed to specify filing date as March 18, 2004
4. The March 18, 2004 filing date was noticed with receipt of Notice of Allowance and Issue Fees due.

History to Correct:

1. Called OIPE and talked with Nhan H. Tang 703-308-9010 (Ext. 190) who suggested that I talk with the Group Art Unit 1725 Thomas Dunn at 571-272-1171.
2. Mr. Dunn was not available but VME said to call Bill Krynski at 571-272-1024 who is out on extended disability. VME said to call Greg Mills at 571-272-1439.
3. Greg Mills was out of the office and VME said to call Pat Ryan 571-272-1292. Mr. Ryan was away from his desk but VME suggested pressing "zero" for immediate help.
4. Talked with Rosemary who discussed our problem with another colleague and transferred me to the Inventors Assistance Center 571-272-4000 #1. Rosemary gave me Ref. Number 1-78958091 and entered the information in their system.
5. Edith answered at the IAC and stated that her screen indicated that the filing date is November 24, 2003. Edith then transferred me back to OIPE and I was again connected with Nhan Tang. Mr. Tang could not understand why none of the above could help me but stated he would look over the papers submitted and get back to me on the matter.
6. Mr. Tang called and explained that for some reason the PTO rescanned the drawings with our MP papers thus giving us the filing date of March 18, 2004. Mr. Tang further explained that he fixed the filing date to reflect the correct date of November 24, 2003.

Elaine K. Mistretta
April 11, 2007

OCT 10 2007



US007246736B2

(12) **United States Patent**
Wang et al.

(10) **Patent No.:** US 7,246,736 B2
(45) **Date of Patent:** Jul. 24, 2007

(54) **SUPPLYING SHIELDING GAS**

(75) **Inventors:** Pei-Chung Wang, Troy, MI (US);
Toshinori Sakai, Yokohama (JP)

(73) **Assignees:** General Motors Corporation, Detroit,
MI (US); Suzuki Motor Corporation,
Shizuoka (JP)

(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 114 days.

(21) **Appl. No.:** 10/720,725

(22) **Filed:** Mar. 18, 2004 Nov. 24, 2003

(65) **Prior Publication Data**

US 2005/0205647 A1 Sep. 22, 2005

(51) **Int. Cl.**

B23K 31/02 (2006.01)

B23K 35/38 (2006.01)

B23K 31/12 (2006.01)

B23K 9/00 (2006.01)

B23K 9/12 (2006.01)

(52) **U.S. Cl.** 228/219; 228/214; 228/103;
219/125.11; 219/74

(58) **Field of Classification Search** 228/219,
228/214, 103, 74; 219/125.11, 74
See application file for complete search history.

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Primary Examiner—Jonathan Johnson

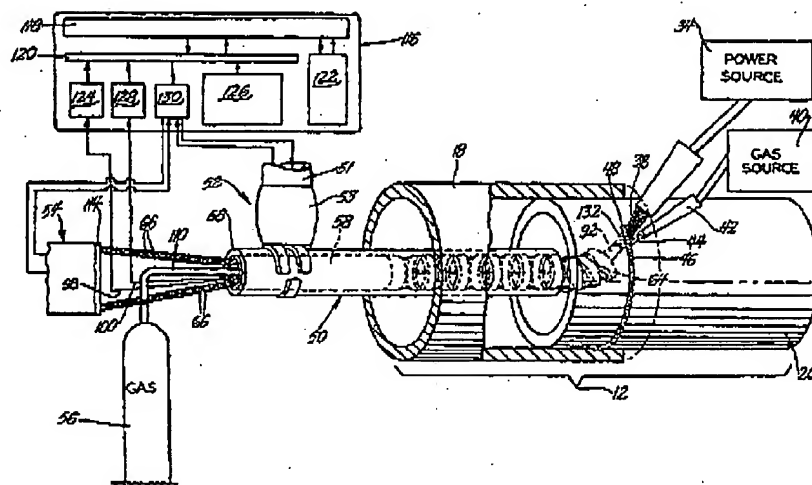
Assistant Examiner—Rachel E. Beveridge

(74) *Attorney, Agent, or Firm*—Kathryn A. Manra

(57) **ABSTRACT**

A flexible articulate tubular device has a shank, a plurality of pivot rings, and a terminus with heat sensors and a fiber optic device. The flexible articulate tubular device is initially positioned, either manually or automatically, near a target weld path with the aid of the fiber optic device. The flexible articulate tubular device is then more precisely articulated to direct the terminus along the target weld path, with the aid of the heat sensors. As such, the flexible articulate tubular device operates in a heat seeking manner to follow the weld bead. Ultimately, a gaseous flux is supplied along the flexible articulate tubular device and toward the target weld path, so as to blast the weld bead with an anti-oxidation shield gas and thereby protect the weld.

15 Claims, 3 Drawing Sheets



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PTO/SB/44 (09-07)

Approved for use through 08/31/2010, OMB 0851-0033

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CERTIFICATE OF CORRECTION**Page 1 of 1

PATENT NO. : 7,246,736
APPLICATION NO.: 10/720,725
ISSUE DATE : July 24, 2007
INVENTOR(S) : Wang et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page: (22) change Filing Date to read — Nov. 24, 2003 —.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

John M. Card, General Motors Corporation
Mail Code 482-C23-B21, 300 Renaissance Center
Detroit, MI 48265-3000

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